

Rhode Island NRCS FY 2006 Resource Concerns and Quality Criteria for EQIP					
Natural Resource Concern	Description of Concern	National Quality Criteria	State Quality Criteria	Assessment Tools for Quality Criteria Evaluation	SEVERITY
<b>SOIL</b>					
<b>Soil Erosion - Sheet and Rill</b>	Detachment and transport of soil particles caused by rainfall splash and runoff degrade soil quality.	Sheet and rill erosion does not exceed the Soil Loss Tolerance "T".	Same as National	<ul style="list-style-type: none"> <li>RUSLE2 (Primary)</li> <li>Visual assessment (pedestals, rills)</li> </ul>	Severe = >4T Moderate = 2T to 4T Low = >T to 2T  Visual assessment will be done to photo document concern (location, extent and severity).
<b>Soil Erosion - Ephemeral Gully</b>	Small channels caused by surface water runoff degrade soil quality and tend to increase in size. On cropland, they can be obscured by heavy tillage.	Surface water runoff is controlled sufficiently to stabilize the small channels and prevent reoccurrence of new channels.	Same as National	<ul style="list-style-type: none"> <li>Volume calculation (Primary)</li> <li>Visual assessment</li> </ul>	Severe = Soil loss increased > 3T Moderate = Soil loss increased 1T to 3T Low Soil loss increased <1T  Visual assessment will be done to photo document concern (location, extent and severity).
<b>Soil Erosion - Classic Gully</b>	Deep, permanent channels caused by the convergence of surface runoff degrade soil quality. They enlarge progressively by headcutting and lateral widening.	Surface water runoff is controlled sufficiently to stop progression of headcutting and widening.	Same as National	<ul style="list-style-type: none"> <li>Volume calculation (Primary)</li> <li>Visual assessment</li> <li>Aerial photo trend analysis</li> </ul>	Severe = Soil loss increased > 3T Moderate = Soil loss increased 1T to 3T Low Soil loss increased <1T  Visual assessment will be done to photo document concern (location, extent and severity).  Aerial photo trend analysis will be done to document time of erosion and use for baseline for monitoring success.

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<b>Soil Erosion - Streambank</b>	Accelerated loss of streambank soils restricts land and water use and management.	Accelerated streambank soil loss does not exceed a level commensurate with upstream land use and normal geomorphological processes on site.	Same as National	<ul style="list-style-type: none"> <li>• Volume calculation (Primary)</li> <li>• Aerial photo trend analysis</li> <li>• Visual assessment, e.g., Stream Visual Assessment Protocol, (Secondary)</li> </ul>	<p>Severe = Soil loss &gt; 1/4T / lin ft.  Moderate = Soil loss between 1/8 to 1/4T / lin. Ft.  Low Soil loss &lt; 1/8 T/ lin. Ft.</p> <p>Aerial photo trend analysis will be done to document time of erosion and use for baseline for monitoring success.</p> <p>Visual assessment will be done using the SVAP and photo documented to record the concern (location, extent and severity).</p>
<b>Soil Erosion – Road, road sides and Construction Sites</b>	Soil loss occurs on areas left unprotected during or after road building and/or construction activities.	Sites are adequately protected from soil loss during and after road building and construction activities (road is impassible to required traffic to conduct normal operations).	Same as National	<ul style="list-style-type: none"> <li>• Volume calculation (Primary)</li> <li>• Aerial photo trend analysis</li> <li>• Visual assessment (on-site photo) (Secondary)</li> </ul>	<p>Severe = Soil loss &gt; 1/4T / lin ft.  Moderate = Soil loss between 1/8 to 1/4T / lin. Ft.  Low Soil loss &lt; 1/8 T/ lin. Ft.</p> <p>Aerial photo trend analysis will be done to document time of erosion and use for baseline for monitoring success.</p> <p>Visual assessment will be done using photo documented to record the concern (location, extent and severity).</p>

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<b>SOIL</b>					
<b>Soil Condition - Organic Matter Depletion</b>	Soil organic matter has or will diminish to a level that degrades soil quality.	Soil Conditioning Index is positive.	Same as National	<ul style="list-style-type: none"> <li>Soil Conditioning Index (Primary)</li> </ul>	Severe = > - 0.30 Moderate = between – 0.10 and – 0.30 Low = 0.0 to – 0.10
<b>Soil Condition – Compaction</b>	Compressed soil particles and aggregates caused by mechanical compaction adversely affect plant-soil-moisture relationships.	Mechanically compacted soils are renovated sufficiently to restore plant root growth and/or water movement.	Same as National	<ul style="list-style-type: none"> <li>Dial penetrometer (Primary)</li> </ul>	Severe = > 300 Moderate = between 200 and 300 Low = 0 to 200
<b>Soil Condition - Contaminants - Animal Waste and Other Organics</b>	Nutrient levels from applied animal waste and other organics restrict desired use of the land.	Nutrient application levels do not exceed soil storage/plant uptake capacities based on soil test recommendations and risk analysis results.	Same as National	<ul style="list-style-type: none"> <li>Rhode Island Phosphorus Index (Primary)</li> <li>Soil test (Secondary)</li> </ul>	Severe = RIPI 65-75 Moderate = RIPI 39-64 Low= RIPI 25-38  Soil test results are needed to identify the limiting nutrient and assess recommendations for applications and establish a base line.
<b>Soil Condition – Contaminants - Commercial Fertilizer</b>	Over application of nutrients degrades plant health and vigor, or exceeds the soil capacity to retain nutrients.	Soil nutrient levels do not exceed crop needs based on realistic yield goals and appropriate pH levels are maintained.	Same as National	<ul style="list-style-type: none"> <li>Rhode Island Phosphorus Index (Primary)</li> <li>Soil test (Secondary)</li> </ul>	Severe = RIPI 65-75 Moderate = RIPI 39-64 Low= RIPI 25-38  Soil test results are needed to identify the limiting nutrient and assess recommendations for applications and establish a base line.

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<b>WATER</b>					
<b>Water Quantity - Excessive Seepage</b>	Subsurface water oozing to the surface restricts land use and management.	Subsurface water is managed to limit periods of saturation that are unfavorable to the present or intended land use. Management complies with wetland policies.	Same as National	<ul style="list-style-type: none"> <li>Visual Assessment (physical presence of water, prevalence of hydrophytic vegetation, etc.) (Primary)</li> <li>Client interview and area measurements (Secondary)</li> </ul>	<p>Visual assessment will be done to photo document concern (location, extent and severity).</p> <p>On cropland, orchards, vineyards:</p> <p>Severe = large area of concern that occupies &gt; 10% of the area, prohibits access to and/or management on the area for greater than 30 days during the growing season (April 1 to August 30).  Moderate = areas where 2 to 10% of the site are in accessible and/or management on for two to four weeks of the growing season.  Low = small, incidental areas (less than 2%) where seepage limits access to and/or management on area for short durations of the growing season (typically, immediately after rainfall events – less than a two week period).</p> <p>Client interview is to establish history of concern (how long seepage has been occurring, time of year, duration and volume estimates). This information should support the claim of restricted use and management of site.</p>

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<b>Water Quantity - Excessive Runoff, Flooding, or Ponding</b>	The land becomes inundated restricting land use and management.	Excess water amounts and/or rates of flow are controlled consistent with desired present or intended land use goals and wetland policies.	Same as National	<ul style="list-style-type: none"> <li>• Visual assessment (Primary)</li> <li>• Stream Visual Assessment Protocol</li> <li>• Hydrologic models, e.g. HECRAS, TR-20, TR-55</li> <li>• Client interview (Secondary)</li> </ul>	<p>Visual assessment will be done to photo document concern (location, extent and severity).</p> <p>Severe = areas (&gt; 10% of the area) affected by runoff, flooding or ponding that limits access to and/or management on the area for greater then 30 days during the growing season (April 1 to August 30).</p> <p>Moderate = areas (2 to 10% of the area) affected by runoff, flooding or ponding that limits access to and/or management on the area for two to four weeks of the growing season.</p> <p>Low = small, incidental areas (less then 2%) affected by runoff, flooding or ponding that limits access to and/or management on area for short durations of the growing season (typically, immediately after rainfall events – less then a two week period).</p> <p>Client interview is to establish history of concern (how long runoff, flooding or ponding has been occurring, time of year, duration and volume estimates). This information should support the claim of restricted use and management of site.</p>

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<b>Water Quantity - Excessive Subsurface Water</b>	Water saturates upper soil layers restricting land use and management.	Subsurface water is managed to limit periods of saturation compatible with the present or intended land use and wetland policies.	Same as National	<ul style="list-style-type: none"> <li>Visual assessment of soil cores and coring holes (Primary)</li> <li>Plant quality and quantity measurements</li> <li>Client interview (Secondary)</li> </ul>	<p>Visual assessment will be done to photo document concern (location, extent and severity).</p> <p>On cropland, orchards, vineyards:</p> <p>Severe = large area of concern that occupies &gt; 10% of the area, prohibits access to and/or management on the area for greater than 30 days during the growing season (April 1 to August 30).</p> <p>Moderate = areas where 2 to 10% of the site are in accessible and/or management on for two to four weeks of the growing season.</p> <p>Low = small, incidental areas (less than 2%) where seepage limits access to and/or management on area for short durations of the growing season (typically, immediately after rainfall events – less than a two week period).</p> <p>Client interview is to establish history of concern (how long excessive subsurface water has been occurring, time of year, duration and volume estimates). This information should support the claim of restricted use and management of site.</p>

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Water Quantity - Inefficient Water Use on Irrigated Land	Limited water supplies are not optimally utilized.	Land and water management is planned and coordinated to provide optimal use of natural and applied moisture.	Same as National	<ul style="list-style-type: none"><li>Farm Irrigation Rating Index (FIRI) and/or Table below (Primary)</li></ul>	Severe = >20% improvement in system efficiency																										
				<table><thead><tr><th>System Type</th><th>System Efficiency (%)</th></tr></thead><tbody><tr><td>Trickle or Drip Irrigation</td><td></td></tr><tr><td>Point Source Emitter</td><td>90</td></tr><tr><td>Spray Emitter</td><td>85</td></tr><tr><td>Continuous Tape</td><td>90</td></tr><tr><td>Sprinkler</td><td></td></tr><tr><td>Handline and Wheel</td><td>70</td></tr><tr><td>Big Gun (stationary)</td><td>60</td></tr><tr><td>Traveling Gun</td><td>67</td></tr><tr><td>Solid Set</td><td>85</td></tr><tr><td>Center Pivot w/overhead spray</td><td>85</td></tr><tr><td>Center Pivot w/drop down emitters</td><td>90</td></tr><tr><td>Linear Move w/overhead spray</td><td>85</td></tr><tr><td>Linear Move w/drop down emitters</td><td>90</td></tr></tbody></table> <p>When converting from one system to another, the difference in system efficiency = increase/improvement in system efficiency.</p> <p>Add 5% improvement in system efficiency for adding buried mainline.</p> <p>IWM is required for all high-volume systems. If not, rank as low and should be an incentive in ranking.</p> <ul style="list-style-type: none"><li>Visual assessment (Secondary)</li></ul>	System Type	System Efficiency (%)	Trickle or Drip Irrigation		Point Source Emitter	90	Spray Emitter	85	Continuous Tape	90	Sprinkler		Handline and Wheel	70	Big Gun (stationary)	60	Traveling Gun	67	Solid Set	85	Center Pivot w/overhead spray	85	Center Pivot w/drop down emitters	90	Linear Move w/overhead spray	85	Linear Move w/drop down emitters
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<b>Water Quantity – Insufficient Flows in Water Courses</b>	Water flows are not consistently available in sufficient quantities to support ecological processes and land use and management.	Authorized uses and management of water are coordinated to minimize the impacts on water course flows.	Same as National	<ul style="list-style-type: none"> <li>Gauge Station data / Water flow records (Primary)</li> <li>Visual assessment (Secondary)</li> </ul>	<p>Based upon the Annual Base Flow (ABF)</p> <p>Severe = Stream withdrawals in low flow watersheds, including Beaver, Queens, and Chepuxet rivers</p> <p>Moderate = Stream withdrawals in Wood/Pawcatuck watershed, the Aquidneck Island and Bristol County drinking water supply areas</p> <p>Low = All other withdrawals</p> <p>Visual assessment will be done to photo document concern (location, extent and severity).</p>
<b>Water Quality - Harmful Levels of Pesticides in Groundwater</b>	Residues resulting from the use of pest control chemicals degrade groundwater quality.	Pesticides are applied, stored, handled, disposed of, and managed so that groundwater uses are not adversely affected	Same as National	<ul style="list-style-type: none"> <li>WIN-PST (Windows Pesticide Screening Tool – USDA/NRCS) (Primary)</li> </ul>	<p>Severe = High or Very High*</p> <p>Moderate = Intermediate*</p> <p>Low = Very Low or Low*</p> <p>*WIN-PST Rating for leaching</p>



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Water Quality - Excessive Nutrients and Organics in Groundwater	Pollution from natural or human induced nutrients such as N, P, and organics (including animal and other wastes) degrades groundwater quality.	Nutrients and organics are stored, handled, disposed of, and applied such that groundwater uses are not adversely affected.	Same as National	<ul style="list-style-type: none"><li>Rhode Island Phosphorus Leaching Index (RIPI) (Primary)</li><li>Nitrate Leaching Index</li></ul>	Severe = RIPI 65-75 Moderate = RIPI 39-64 Low= RIPI 25-38  For HUAs (areas where livestock are confined for 45 days or more a year and forage will not be grown for feed within the confined area):																				
				<table><tr><td></td><td colspan="4">Distance between HUA and Sensitive Area (Sole Source Aquifer, public well, state id wetland, third , second or first order watercourse) without an adequate buffer.</td></tr><tr><td>Severity</td><td>Slope of Contributing Area</td><td>Soil Texture Class I</td><td>Soil Texture Class II</td><td>Soil Texture Class III</td></tr><tr><td>Severe</td><td>&gt;5 %</td><td>&lt; 200'</td><td>&lt; 250'</td><td>&lt; 300'</td></tr><tr><td>Moderate</td><td>3-5%</td><td>&lt; 150'</td><td>&lt; 200'</td><td>&lt; 250'</td></tr><tr><td>Low</td><td>0-3%</td><td>&lt; 100'</td><td>&lt; 150'</td><td>&lt; 200'</td></tr></table> Soil Texture Class I - sands and loamy sands Soil Texture Class II - sandy clay loams and sandy loams Soil Texture Class III – all other textural classes		Distance between HUA and Sensitive Area (Sole Source Aquifer, public well, state id wetland, third , second or first order watercourse) without an adequate buffer.				Severity	Slope of Contributing Area	Soil Texture Class I	Soil Texture Class II	Soil Texture Class III	Severe	>5 %	< 200'	< 250'	< 300'	Moderate	3-5%	< 150'	< 200'	< 250'	Low
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Water Quality - Harmful Levels of Petroleum in Groundwater	Fuel, oil, gasoline and other hydrocarbons present in toxic amounts degrade groundwater quality.	Petroleum products are used, stored, handled, disposed of, and managed such that groundwater uses are not adversely affected.	Same as National	<ul style="list-style-type: none"><li>Soil and Ground water resource maps (Primary)</li><li>Visual assessment (Secondary)</li></ul>	Severe = Permeability > 2.0 in./hr. Moderate = Permeability between 0.2 and 2.0 in./hr. Low = Permeability< 0.2 in./hr.  Visual assessment will be done to photo document concern (location, extent and severity).																				

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Water Quality - Harmful Levels of Pesticides in Surface Water	Pest control chemicals present in toxic amounts degrade surface water quality.	Pesticides are applied, stored, handled, disposed of, and managed such that surface water uses are not adversely affected	Same as National	<ul style="list-style-type: none"><li>WIN-PST (Windows Pesticide Screening Tool – USDA/NRCS)</li></ul>	Severe = High or Very High* Moderate = Intermediate* Low = Very Low or Low*  *WIN-PST Rating for leaching																									
Water Quality - Excessive Nutrients and Organics in Surface Water	Pollution from natural or human induced nutrients such as N, P, and organics (Including animal and other wastes) degrades surface water quality.	Nutrients and organics are stored, handled, disposed of, and managed such that surface water uses are not adversely affected.	Same as National	<ul style="list-style-type: none"><li>Rhode Island Phosphorous index (RIPI) (Primary)</li></ul> SVAP (Stream Visual Assessment Protocol – USDA/NRCS)	For Cropland, Hayland and Pasture:  Severe = RIPI 65-75 Moderate = RIPI 39-64 Low= RIPI 25-38  For HUAs (areas where livestock are confined for 45 days or more a year and forage will not be grown for feed within the confined area): <table border="1"><tr><td></td><td colspan="4">Distance between HUA and Sensitive Area (Sole Source Aquifer, public well, state id wetland, third , second or first order watercourse) without an adequate buffer.</td></tr><tr><td>Severity</td><td>Slope of Contributing Area</td><td>Soil Texture Class I</td><td>Soil Texture Class II</td><td>Soil Texture Class III</td></tr><tr><td>Severe</td><td>&gt;5 %</td><td>&lt; 200'</td><td>&lt; 250'</td><td>&lt; 300'</td></tr><tr><td>Moderate</td><td>3-5%</td><td>&lt; 150'</td><td>&lt; 200'</td><td>&lt; 250'</td></tr><tr><td>Low</td><td>0-3%</td><td>&lt; 100'</td><td>&lt; 150'</td><td>&lt; 200'</td></tr></table> Soil Texture Class I - sands and loamy sands Soil Texture Class II - sandy clay loams and sandy loams Soil Texture Class III – all other textural classes  SVAP will be used to establish a baseline for use in future assessments.		Distance between HUA and Sensitive Area (Sole Source Aquifer, public well, state id wetland, third , second or first order watercourse) without an adequate buffer.				Severity	Slope of Contributing Area	Soil Texture Class I	Soil Texture Class II	Soil Texture Class III	Severe	>5 %	< 200'	< 250'	< 300'	Moderate	3-5%	< 150'	< 200'	< 250'	Low	0-3%	< 100'	< 150'	< 200'
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<b>Water Quality - Excessive Suspended Sediment and Turbidity in Surface Water</b>	Pollution from mineral or organic particles degrades surface water quality.	Movement of mineral and organic particles is managed such that surface water uses are not adversely affected.	Same as National	<ul style="list-style-type: none"> <li>SVAP (Stream Visual Assessment Protocol – USDA/NRCS) (Primary)</li> <li>Visual assessment</li> <li>Client interview</li> </ul>	<p>SVAP will be used as the primary tool and to establish a baseline for use in future assessments.</p> <p>Severe = Moderate = Low =</p> <p>Visual assessment will be done to photo document concern (location, extent and severity).</p> <p>Client interview is to establish history of concern (how long excessive suspended sediment has been occurring, time of year and duration).</p>
<b>Water Quality - Harmful Temperatures of Surface Water</b>	Undesired thermal conditions degrade surface water quality.	Use and management of land and water are coordinated to minimize impacts on surface water temperatures.	Same as National	<ul style="list-style-type: none"> <li>SVAP (Stream Visual Assessment Protocol – USDA/NRCS) – canopy cover (Primary)</li> </ul> <p>and/or</p> <p>Thermal pollution identified as a limiting factor in state collected data bases.</p>	<p>SVAP will be used as the primary tool and to establish a baseline for use in future assessments.</p> <p>Severe = Moderate = Low =</p>

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<b>Water Quality - Harmful Levels of Pathogens in Surface Water</b>	Kinds and numbers of viruses, protozoa, and bacteria are present at a level that degrades surface water quality.	Materials that harbor pathogens are stored, handled, disposed of, applied, and managed such that surface water uses are not adversely affected.	Same as National	<ul style="list-style-type: none"> <li>State 303d listed</li> </ul>	Severe = Primary pollutant of concern on impacted waterbody Moderate = Identified as a possible pollutant of concern on impacted waterbody. Low = Data from other sources indicating occurrence of pathogens within the watershed adjacent to a listed waterbody.
<b>Water Quality - Harmful Levels of Petroleum in Surface Water</b>	Fuel, oil, gasoline and other hydrocarbons present in toxic amounts degrade surface water quality.	Petroleum products are used, stored, handled, and disposed of such that groundwater uses are not adversely affected.	Same as National	<ul style="list-style-type: none"> <li>State 303d listed</li> </ul>	Severe = Primary pollutant of concern on impacted waterbody Moderate = Identified as a possible pollutant of concern on impacted waterbody. Low = Data from other sources indicating occurrence of pathogens within the watershed adjacent to a listed waterbody.

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AIR					
<b>Air Quality – Objectionable Odors</b>	<p>Land use and management operations produce offensive smells.</p> <p>Airborne Odors = Objectionable odors from such sources as confined livestock, animal waste, waste storage areas, waste lagoons, field application of animal waste, and other organics.</p>	Odor-producing facilities and activities are planned and sited to mitigate potential nuisance impacts and meets all applicable Tribal, State, and Local regulations.	Same as National	<ul style="list-style-type: none"> <li>• Olfactory assessment (include client interview and statements from regulatory or administrative offices of local municipalities) (Primary) and use the Agricultural Waste Management Field Handbook (AWMFH) (Secondary)</li> </ul>	<p>Assessment will be based upon prevailing winds and landscape elements such as building arrangement, landform, and vegetation from which odors may emanate and visual resource concerns may compound the concern.</p> <p>Severe = Source of odor is within 100 feet of property line, neighboring property or other targeted concern.  Moderate = Source of odor is between 100 and 200 feet of property line, neighboring property or other targeted concern.  Low = Source of odor is greater than 200 feet of property line, neighboring property or other targeted concern.</p>

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<b>Air Quality - Chemical Drift</b>	Materials applied for pest control drift downwind and contaminate/injure non-targeted fields, crops, soils, water, animals and humans.	Land use and management operations comply with all applicable Federal, Tribal, State, and Local regulations, and applicable label directions.	Same as National	<ul style="list-style-type: none"> <li>Assessment will be based upon prevailing winds and landscape elements (such as landform and vegetation).</li> <li>Visual assessment (secondary)</li> <li>Client interview</li> </ul>	Severe = Source of Chemical Drift from field applications is within 100 feet of property line, neighboring property or other targeted concern. Moderate = Source of Chemical Drift is between 100 and 200 feet of property line, neighboring property or other targeted concern. Low = Source of Chemical Drift is greater than 200 feet of property line, neighboring property or other targeted concern.
<b>Air Quality - Excessive Greenhouse Gas – CH<sub>4</sub> (methane)</b>	Increased CH <sub>4</sub> concentrations are adversely affecting ecosystem processes. .	Land use and management operations comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	Same as National	<ul style="list-style-type: none"> <li>RI livestock Assessment Tool or</li> <li>Client interview</li> </ul>	Severe = AFO with land application of manure without approved CNMP Moderate = AFO without land application of manure without CNMP. Low = Operations without livestock and no approved nutrient management plan.

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<b>AIR</b>					
<b>Air Quality - Excessive Noise</b>	Increased noise levels concentrations are adversely affecting adjoining properties.	Land use and management operations comply with requirements of the local or State regulations.	Same as National	<ul style="list-style-type: none"> <li>Qualified Noise Assessment Report</li> <li>Client interview</li> </ul>	<p>Severe = Continuous (machinery that operates without interruption – a minimum of a 4our hour period on a daily basis) noise levels at or above the 10 dB levels within 100 of property lines.</p> <p>Moderate = Intermittent noise levels (machinery operating in cycles or on irregular basis – at less then a four hour basis on a less then daily basis) at or above the 10 dB levels within 100 of property lines.</p> <p>Low = Intermittent (machinery operating in cycles or on irregular basis – at less then a four hour basis on a less then daily basis) noise levels at or above the 10 dB levels within 100 of property lines.</p>
<b>Air Quality - Excessive Ozone</b>	High concentrations of ozone (O <sub>3</sub> ) are adversely affecting human health, reducing plant yields, and leading to the creation of smog.	Land use and management operations comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	Same as National	<ul style="list-style-type: none"> <li>Specific guidelines contained in State or Federal Implementation Plan; or other approved NRCS tools (engines do not meet EPA Tier II requirements).</li> </ul>	<p>Severe = Non-road heavy duty diesel fuel engines (greater than 49 Hp) that do not meet EPA Tier II requirements.</p> <p>Moderate = Non-road 2-stroke engines that do not meet EPA Tier II requirements.</p> <p>Low = Low Hp (less then 50 Hp) stationary gasoline engines.</p>

Rhode Island NRCS FY 2005 Resource Concerns and Quality Criteria for EQIP					
Natural Resource Concern	Description of Concern	National Quality Criteria	State Quality Criteria	Assessment Tools for Quality Criteria Evaluation	SEVERITY
AIR					
<b>Air Quality - Particulate matter less than 10 micrometers in diameter (PM 10)</b>	Particulate matter less than 10 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	Land use and management operations comply with PM 10 requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and Local regulations.	Same as National	<ul style="list-style-type: none"> <li>Specific guidelines contained in State or Federal Implementation Plan; or other approved NRCS tool (engines do not meet EPA Tier II requirements).</li> <li></li> </ul>	Severe = Non-road heavy duty diesel fuel engines (greater than 49 Hp) that do not meet EPA Tier II requirements. Moderate = Non-road 2-stroke engines that do not meet EPA Tier II requirements. Low = Low Hp (less than 50 Hp) stationary gasoline engines.



Rhode Island NRCS FY 2005 Resource Concerns and Quality Criteria for EQIP					
Natural Resource Concern	Description of Concern	National Quality Criteria	State Quality Criteria	Assessment Tools for Quality Criteria Evaluation	SEVERITY
PLANTS					
Plant – Condition-Productivity, Health and Vigor	Plants do not produce the yields, quality, and soil cover to meet client objectives.	<p>Selected plants on or planned for the site are sufficiently productive to meet or exceed client needs.</p> <p><b>Cropland:</b> A healthy stand with vigorous growth produces at least 75% of site potential.</p> <p><b>Pastureland:</b> Forage yields are at least 75% of high management estimates cited yields listed in the Yield Tables in Section II A. of the RI eFOTG.</p> <p><b>Hayland:</b> Forage Yields at least 75% of high mgt. estimates cited yields listed in the Yield Tables in Section II A. of the RI eFOTG.</p> <p><b>Forestland/ Agroforest:</b> Forests consist of healthy stands with vigorous growth having a stand density within 25% of optimum stocking on a stems/acre basis.</p>	Same as	<ul style="list-style-type: none"> <li>Client interview (Primary)</li> <li>For cropland and hayland.</li> <li>For Pasture Use The RI Pasture Condition Score Sheet Indicators: percent desirable plants, plant cover, plant residue, plant vigor, percent legumes and uniformity of use.</li> <li>For Forestland, use the forest stewardship plan data submitted by a consulting forester.</li> </ul>	<p>Client interview is to establish history of plant yield (records to include amounts and dates) to be compared to targeted yields listed in the Yield Tables in Section II A. of the RI eFOTG.</p> <p>Severe if Yield &lt; 50% of target Moderate if Yield between 50 to 75% of target Low if Yield at 75% or better of target</p> <p>Severe if PCS is 2 or less Moderate if PCS &gt;2 and less then 4 Low if PCS sub total &gt; 4</p> <p>Severe if Yield &lt; 50% of target Moderate if Yield between 50 to 75% of target Low if Yield at 75% or better of target</p>

Rhode Island NRCS FY 2005 Resource Concerns and Quality Criteria for EQIP					
Natural Resource Concern	Description of Concern	National Quality Criteria	State Quality Criteria	Assessment Tools for Quality Criteria Evaluation	SEVERITY
<b>PLANTS</b>					
<b>Plant Condition - Threatened or Endangered Plant Species</b>	Plant populations and /or habitat quantity and quality have reached a level that one or more plant species are in danger of or threatened with extinction.	Threatened and endangered plant species and/or habitats they occupy are managed to avoid actions that would reduce their current population, health, or sustainability.	Same as National	<ul style="list-style-type: none"> <li>Consultation with appropriate federal, state, and local agencies/groups (Primary)</li> <li>Client interviews</li> </ul>	<p>Severe = T&amp;E species identified within CTU  Moderate = T&amp;E species identified within range of CTU for possible impact by management for specie.  Low = T&amp;E species not present but CTU has been identified as a potential site by specialist.</p> <p>Client interview is to establish know history/incidence/management of T&amp;E on site.</p>
<b>Plant Condition - Noxious and Invasive Plants</b>	The site has noxious or invasive plants present.	The site is managed to control noxious and invasive plants and to minimize their spread.	Same as National	<ul style="list-style-type: none"> <li>Inventory site using RI HAP for Invasive Plants (Primary)</li> <li>Client interviews</li> </ul>	<p>Severe if HIS = 0.1 but less then 0.5  Moderate if HIS = 0.5 but less then 1.0  Low if HIS is = 1.0</p> <p>Client interview is to establish know history/incidence/management of noxious or invasive plants on site.</p>

Rhode Island NRCS FY 2005 Resource Concerns and Quality Criteria for EQIP					
Natural Resource Concern	Description of Concern	National Quality Criteria	State Quality Criteria	Assessment Tools for Quality Criteria Evaluation	SEVERITY
<b>ANIMALS</b>					
<b>Fish and Wildlife - Inadequate Food</b>	Quantity and quality of food is unavailable to meet the life history requirements of the species or guild of species of concern	Food availability meets the life history requirements of the species or guild of species of concern.	Same as National	<ul style="list-style-type: none"> <li>Inventory site using RI HAP for Invasive Plants (Primary)</li> <li>Visual assessment</li> </ul>	Severe if HIS = 0.1 but less than 0.5 Moderate if HIS = 0.5 but less than 1.0 Low if HIS is = 1.0  Visual assessment will be done to photo document concern (location, extent and severity).
<b>Fish and Wildlife – Inadequate Cover/Shelter</b>	Cover/shelter for the species of concern is unavailable or inadequate. For aquatic species, this includes lack of hiding, thermal, and/or refuge cover	The ecosystem or habitat types support the necessary plant species in the kinds, amounts, and physical structure; and the connectivity of fish and wildlife cover is adequate to support, over time, the species of concern.	Same as National	<ul style="list-style-type: none"> <li>Inventory site using RI HAP for Invasive Plants (Primary)</li> <li>Visual assessment</li> </ul>	Severe if HIS = 0.1 but less than 0.5 Moderate if HIS = 0.5 but less than 1.0 Low if HIS is = 1.0  Visual assessment will be done to photo document concern (location, extent and severity).
<b>Fish and Wildlife – Inadequate Water</b>	The quantity and quality of water is unacceptable for the species of concern	The quantity and quality of water meets the life history requirements of the species of concern.	Same as National	<ul style="list-style-type: none"> <li>Inventory site using RI HAP for Invasive Plants (Primary)</li> <li>Visual assessment</li> </ul>	Severe if HIS = 0.1 but less than 0.5 Moderate if HIS = 0.5 but less than 1.0 Low if HIS is = 1.0  Visual assessment will be done to photo document concern (location, extent and severity).

Rhode Island NRCS FY 2005 Resource Concerns and Quality Criteria for EQIP					
Natural Resource Concern	Description of Concern	National Quality Criteria	State Quality Criteria	Assessment Tools for Quality Criteria Evaluation	SEVERITY
<b>ANIMALS</b>					

<b>Fish and Wildlife - Threatened and Endangered Species</b>	Fish and wildlife populations and/or habitat quantity and quality have reached a level that one or more species are in danger of or threatened with extinction.	Threatened and endangered fish and wildlife species and/or habitats they occupy are managed to avoid actions that would reduce their current population, health, or sustainability.	Same as National	<ul style="list-style-type: none"> <li>• Consultation with appropriate federal, state, and local agencies /groups (Primary)</li> <li>• Client interviews</li> </ul>	<p>Severe = T&amp;E species identified within CTU  Moderate = T&amp;E species identified within range of CTU for possible impact by management for specie.  Low = T&amp;E species not present but CTU has been identified as a potential site by specialist.</p> <p>Client interview is to establish know history/incidence/management of T&amp;E on site.</p>
<b>Domestic Animals – Inadequate Quantities and Quality of Feed and Forage</b>	Total feed and forage is insufficient to meet the nutritional and production needs of the kinds and classes of livestock	Feed and forage including supplemental nutritional requirements are provided to meet production goals for the kinds and classes of livestock. Native grazers are factored into the total feed and forage balance computations.	Same as National	<ul style="list-style-type: none"> <li>• Measured inventory</li> <li>• Visual assessment</li> </ul>	<p>Severe =  Moderate =  Low =</p> <p>Visual assessment will be done to photo document concern (location, extent and severity).</p>

Rhode Island NRCS FY 2005 Resource Concerns and Quality Criteria for EQIP					
Natural Resource Concern	Description of Concern	National Quality Criteria	State Quality Criteria	Assessment Tools for Quality Criteria Evaluation	SEVERITY
<b>ANIMALS</b>					
<b>Domestic Animals – Inadequate Shelter</b>	Livestock are not protected sufficiently to meet the production goals for the kinds and classes of livestock	Artificial and/or natural shelter is provided to meet production goals for the kinds and classes of livestock.	Same as National	<ul style="list-style-type: none"> <li>Inventory of facilities and their capacities (Primary)</li> <li>Visual assessment</li> <li>Aerial photo analysis</li> </ul>	<p>If existing percentage of the targeted* paddock or HUA is:</p> <p>Severe = &lt; 50%  Moderate = between 50 – 80%  Low = &gt; 80 but under 100%</p> <p>*Target horse paddock area is 180 sq. ft. per animal and target cattle HUA area is 100 sq. ft. per animal.</p> <p>Visual assessment will be done to photo document concern (location, extent and severity). Paddock sizes must be sufficient for animals in sacrifice areas or HUAs.</p>
<b>Domestic Animals – Inadequate Stock Water</b>	The quantity, quality and distribution of drinking water is insufficient to meet the production goals for the kinds and classes of livestock	Sufficient water of acceptable quality is provided and adequately distributed to meet production goals for the kinds and classes of livestock. To reduce potential for water contamination, watering facilities are constructed or modified to minimize mortality to indigenous wildlife.	Same as National	<ul style="list-style-type: none"> <li>Inventory of distribution needs (Primary)</li> <li>Visual assessment</li> <li>Aerial photo analysis</li> </ul>	<p>Severe =  Moderate =  Low =</p> <p>Visual assessment will be done to photo document concern (location, extent and severity).</p>